

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

In the patent application of

Leslie E. Smith et al.
Serial No. 10/743,936
Filing Date 12/23/2003
For FORMATION OF WIDE PAINT FILM PARTS

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Amended Brief

On appeal from

Group Art Unit 1732
Examiner Monica A. Fontaine
Supervisory Primary Examiner Michael P. Colaianni

Commissioner for Patents
Alexandria, VA 22313-1450

I certify that this correspondence is facsimile-transmitted
to the Patent and Trademark Office (571 273 8300) on 15 NOV 2005:

Christopher John Rudy: Christopher John Rudy 15 NOV 2005.

Please consider this brief in support of the patentability of
the claims on appeal. This brief is submitted in reply to the
11/02/2005 Notification of Non-Compliant Appeal Brief, and it
satisfies the requirements of 37 CFR 41.37.

Real Party in Interest

The real parties in interest are Durakon Acquisition Corp.,
and Durakon Industries, Inc. The former holds the present
application for benefit of the latter.

Related Appeals and Interferences

No appeal nor interference is known that would directly
affect, be directly affected by, or have a bearing hereon.

Status of Claims

Claims 10-12 and 20-35 are present. Claims 10-12 and 20-31
are elected, and claims 32-35 are withdrawn. Claims 1-9 and 13-19
are canceled. Claims 10-12 and 20-31 are on appeal.

Status of Amendments

An AF Amendment to Correct Dependencies of Withdrawn Claims
was filed on September 13, 2005. Earlier this November by phone
SPE Colaianni reported that that amendment will not be entered.

Summary of Claimed Subject Matter

As pointed out in the sole independent claim that is on

Smith et al., 10/743936

Amd. Brief, p. 2

appeal, claim 10, a method for forming wide paint film parts, which are parts that are wider than the paint film sheet stock from which the parts are made (page 2, lines 21-22), comprises providing apparatus for forming wide paint film parts, having a frame; and, attached to the frame, at least two paint film stock grasping members, which generally oppose one another, which can grasp deformable paint film stock, at least one of which can be moved apart from the other while the stock is grasped (page 7, full paragraph; paragraphs bridging pages 7-9 and 10-11: FIGS. 1-20, feature Nos. 7, 8, 10, 50/60, 100); providing deformable paint film stock, which is: in a form of a discrete, substantially planar sheet, made of a laminate material including a deformable base having a paint film laminated thereon that provides a painted surface finish, and able to be itself formed into a part through vacuum pressure molding (page 1, third paragraph; paragraphs bridging pages 7-9 and 10-11: FIGS. 9 and 21, feature Nos. 7, 8, 9); grasping the stock sheet on generally opposing sides by at least two paint film stock grasping members (page 8, lines 2-5; page 10, lines 17-21; FIG. 9, feature Nos. 7, 8, 50/60); and moving, while the stock is so grasped, the at least one of the at least two paint film stock grasping members apart from the other so as to draw or stretch the stock between the at least two paint film stock grasping members in the plane of the sheet so as to form a planarly drawn or stretched planar laminate paint film sheet that retains a painted surface finish (sentence bridging pages 5-6; page 8, lines 17-20; page 10, lines 22-24; page 11, lines 10-12; FIG. 9, feature Nos. 7, 8, 50/60). The provisions of 35 USC 112, sixth paragraph, are not invoked.

Grounds of Rejection to Be Reviewed on Appeal

The issues presented for review are these:

1. Are not claims 10, 11 and 20-31 patentable under the meaning of 35 USC 103(a) over patent No. 2,759,217 to Peterson in view of patent No. 5,760,122 to Susa et al.?
2. Is not claim 12 patentable under the meaning of Sec. 103(a) over Peterson in view of Susa et al., further in view of patent No. 6,487,902 to Ghosh?

Argument

In the record and in this brief, all rejections and adverse statements are traversed. The following is contended in support of the patentability of the present claims:

Overall, neither artificial combination teaches nor suggests the claimed invention to an ordinary artisan of the pertinent art

Amd. Brief, p. 3

Smith et al., 10/743936

of paint film sheet technology under the meaning of Sec. 103(a). Nonanalogous art has been applied; the prior art has been misapprehended, misread or dismissed, including teachings away; fabrications have been made and deemed prior art; and pertinent claim limitations have been ignored.

The present methods advance the art in kind. They provide for formation of wide paint film parts wider than the paint film sheet stock from which the parts are made (specification page 2, lines 21-22). This advance has many advantages heretofore unknown to the art, among which are that the paint film industry is now not necessarily limited with respect to sheet width. Thus, many wide products, for example, tonneau covers, can now be made with paint film sheet stock; and so, avoided are hazards associated with spray or electrostatic painting of wide parts otherwise made by known technology, and reducing manufacturing costs (specification page 2, line 23, to page 3, line 2).

More particularly, the following is submitted:

1. Each of claims 10, 11, 20-31 is patentable over Peterson in view of Susa under the meaning of Sec. 103(a).

Petersen discloses a stretching and forming apparatus, which relates to stretching and forming sheet material to modify its properties. As noted in the Amendment filed on February 1, 2005 and the AP Remarks filed on June 17, 2005, the Examiners admitted in the 11/16/2004 action (Paper No. 110304) that Peterson does not show stretching a paint film. Nor does Peterson concern nor disclose the stretching of laminate paint film sheet stock. The Examiners also admitted in the 04/18/2005 final action (Paper No. 040705) that Peterson does not show using a laminate material. Incongruously, and to serve their intended purpose to obstruct the issue of a patent rightfully due, the Examiners falsely assert in Paper No. 040705, among other things, that Peterson shows that it is known to provide deformable paint film stock, which is in a form of a discrete substantially planar sheet able to be itself formed into a part through pressure molding, and stretching it, but which is only disclosed and claimed hereby.

Susa et al. discloses a matte paint film, and a matte paint composition. It shows standard, well known forming of laminate paint film sheet stock into molded parts such as by vacuum forming. There is no disclosure of stretching a laminate paint film sheet stock in a two dimensional direction to provide a drawn or stretched, two dimensionally extended, laminate paint film sheet stock into a wider laminate paint film sheet stock, which can be a precursor for or formed into a finished wide three dimensional part. Furthermore, there is not described any "stretching operation" as referred to in Paper Nos. 110304 and 040705. Rather, the operation that is described by Susa et al. is a standard molding operation, and the "stretching" is referred to as an undesirable adjunct, noting that it occurs from molding and only on certain portions of the molded product and causes reduction in its value.

Smith et al., 10/743936

Amd. Brief, p. 4

On the other hand, the present claimed invention, in claims 10 et seq., relates to formation of valuable wide sheet paint film part precursors and parts made from laminate paint film sheet stock, i.e., precursors and parts that can be wider than original, commercially available laminate paint film stock sheets. Neither Peterson nor Susa et al. relates to nor discloses formation of such wide paint film sheet precursors by drawing or stretching, nor parts therefrom.

The references are not combinable since they are in different technical fields, one, Peterson, stretching and forming plastics such as for aircraft windshields to modify their properties, the other, Susa et al., for providing a matte finish paint film for standard molding. Neither of these is concerned with problems confronted and solved by the present inventors, which include:

formation of wide paint film products that can be wider than the starting paint film sheet stock; and avoiding hazards associated with spray or electrostatic painting of wide parts otherwise made by prior art technology, which would require painting after their form and dimensions have been provided.

Compare, the present specification, paragraph bridging pages 2-3. See, e.g., In re Oetiker, 977 F.2d 1443, 1447, 24 USPQ2d 1443, 1445 (Fed. Cir. 1992).

Furthermore, the Examiners have offered no practical motivation from the prior art to combine the references, nor have they presented a convincing line of reasoning as to why the ordinarily skilled artisan would combine the references otherwise to support their proposed combination. This is improper, and material error. The purported motivation and reasoning to support it, as set forth in Paper No. 040705 on page 3, lines 13-14, is not practical and not even abstract, but false. Susa et al. and Peterson are clearly not in the same technical field: as noted here and elsewhere, Susa et al. relates to standard vacuum molding of paint film laminates through improvements in laminate composition, nothing else; and Peterson does not relate to laminates at all, much less paint film laminates, with, in fact, only unlaminated sheets of uniform composition such as those of clear plastic for transparent airplane canopies or of magnesium or beryllium metals. As well, it is insufficient to establish obviousness that separate elements of an invention existed in the prior art, absent some teaching or suggestion, in the prior art, to combine the elements. Indeed, the many years of use of the technology of Peterson separate from the technology of standard vacuum molding pertinent to Susa et al. weighs further on the side of unobviousness in light of the combination. Compare, Arkie Lures v. Gene Larew Tackle Inc., 119 F.3d 953, 43 USPQ2d 1294, 1297 (Fed. Cir. 1997); Ex parte Clapp, 227 USPQ 972, 973 (BPAI 1985).

Moreover, even if for the sake of argument they could be properly combined, their combined teachings would not lead the ordinary artisan, who does not seek to innovate, to the present claimed invention. Note, Standard Oil Co. v. American Cyanamid

Smith et al., 10/743936

Amd. Brief, p. 5

Co., 774 F.2d 448, 455, 227 USPQ 293, 298 (Fed. Cir. 1985). Rather, they lead away. For when paint film stock is made of concern, not in Peterson but as in Susa et al., standard molding is employed, and any problems with inferior finishes are addressed not by stretching, which is noted as being undesirable at column 1, lines 28-29, but by modifying the paint film composition and using it, again, in a standard molding method. When stretching stock is desired, not in Susa et al. but in Peterson, clear, admittedly nonlaminated stock is employed for the purpose. No laminated sheet stock stretching to form a drawn or stretched two dimensional precursor is contemplated nor disclosed by the prior art, as is disclosed and claimed hereby only, and such art discourages the practice of the present invention. This is strong evidence of unobviousness. See, e.g., In re Hedges, 783 F.2d 1038, 1041, 228 USPQ 685, 687 (Fed. Cir. 1986).

The inventors have discovered that standard paint film sheet stock can be used with benefit, retaining the paint film finish, in the present claimed methods. This discovery, as noted above, goes against conventional wisdom of prior art, and constitutes strong evidence of unobviousness. Id.

In reference to the claims dependent on 10 et seq., Peterson does not show the process as claimed in present (nor former) claims 10 et seq., as inaccurately stated repeatedly by the Examiners. In fact, the Examiners openly admit this, as referred to above, for example, on page 4, line 9 of Paper No. 110304, and page 3, lines 9-10 of Paper No. 040705. Note that the claims at issue, among other things, require processing of paint film sheet stock and forming a planarly drawn or stretched laminate paint film sheet that retains a painted surface finish.

The only art that discloses and claims stretching a paint film sheet stock to a wider state is the present specification. To read this fundamental improvement into prior art is a grave error indeed, as it is heretofore clearly unknown. It is well established that obviousness cannot be predicated on the unknown. See, e.g., In re Rijckaert, 9 F.3d 1531, 28 USPQ2d 1955, 1957 (Fed. Cir. 1993), citing, In re Spoorman, 363 F.2d 444, 448, 150 USPQ 323, 326 (CCPA 1981).

Claims 11, 20, 21, 25, 28 and 31 directly or implicitly include use of heat to stretch or draw the paint film sheet stock. Since the prior art does not teach nor suggest drawing or stretching of paint film sheet stock, especially to include forming a planarly drawn or stretched planar laminate paint film sheet that retains a painted surface finish, as incorporated from base claim 10, it is silent as to how this may be accomplished. It may be obvious to try heating the stock to accomplish this. Perhaps, not knowing of the invention, it would work, perhaps not. Nevertheless, obvious to try is not a sufficient standard to establish a case of obviousness. See, e.g., In re Goodwin, 576 F.2d 375, 377, 198 USPQ 1, 3 (CCPA 1978). On the other hand, Susa et al., in fact, discloses problems in paint film technology

Smith et al., 10/743936

Amd. Brief, p. 6

from heating and vacuum molding the stock, molding problems which are loosely termed, "stretching," and which were addressed, not by heating and planarly stretching sheet stock, but by altering the composition of the paint film laminate. This certainly teaches away from the application of heat in such drawing or stretching and is strong evidence of the unobviousness of these claims. See, Hedges, 783 F.3d at 1041, 228 USPQ at 687.

Further, regarding each of claims 21-31, the disclosure of Peterson, which, again, does not show the method as claimed in base claim 10 nor any other intervening claim, again, relates to un laminated sheet stretching and forming. It may be obvious to try drawing or stretching, and, if applicable, later forming, in the manner specified by each of these dependent claims, with laminated paint film sheet stock and forming a planarly drawn or stretched laminate paint film sheet that retains a painted surface finish, but this, again, is not a sufficient standard to establish a case of obviousness. Note, Goodwin, 576 F.2d at 377, 198 USPQ at 3. Moreover, as submitted above, Susa et al., in fact, teaches away from the present claimed invention by disclosing problems in laminated paint film technology from heating and vacuum molding the stock, which were addressed, not by heating and stretching sheet stock, but by altering the composition of the paint film laminate, which teaches away from the present claimed invention and is strong evidence of the unobviousness of these claims. Note, Hedges, 783 F.3d at 1041, 228 USPQ at 687.

2. Claim 12 is patentable under the meaning of Sec. 103(a) over Peterson in view of Susa et al., and further, Ghosh.

With respect to claim 12, its rejection is treated as falling under under Sec. 103(a) by virtue of it being included with the broad rejection heading on page 2 of Paper No. 040705. Citation of PCT Article 33(3) as done by the Examiners on page 6 of Paper No. 040705 is insufficient to establish a case of obviousness under Sec. 103(a) and belies an untoward eagerness on the part of the Examiners to reject this claim for no acceptable reason.

Peterson and Susa et al. are discussed above.

Ghosh discloses an apparatus and method for biaxial tensile testing of membrane materials. Only polyester spunbond material was tested, and fabric such as nonwoven and geo textiles and membrane materials such as films, reinforced and polymeric films, soft composites, coated laminates are contemplated to be tested. The polyester spunbond material was stretched 28%. Nothing there is manufactured; instead, test materials are destroyed (failure). No parts-formable sheet stock such as of paint film is mentioned.

The base combination of Petersen and Susa et al., as noted above, does not teach nor suggest base claim 10 to the ordinary artisan under the meaning of Sec. 103(a). Nothing is added by Ghosh to Peterson and Susa et al. to remedy their deficiencies in this regard. Thus, base claim 10 distinguishes over the proposed

Smith et al., 10/743936

Amd. Brief, p. 7

combination, and, by virtue of its dependence on claim 10, claim 12 also distinguishes over the proposed combination.

Claim 12 requires at least 125% stretching. Nothing in the prior art teaches nor suggests this for paint film sheet stock.

As pointed out in the Amendment, the paint film sheet stock employed in the present method is not a fabric, nor is it a membrane material, nor, in particular, is it a spunbond polyester material, as disclosed by Ghosh. It is a parts-formable, laminated paint film stock sheet. Moreover, the present method is not a test method. It is a manufacturing method. Such differences are fundamental and irreconcilable with respect to establishment of a prima facie case of obviousness. Furthermore, the three cited references are not combinable since they are in different technical fields, one, Peterson, stretching and forming unlaminated plastics such as for aircraft windshields to modify their properties, or certain metals; another, Susa et al., a matte finish paint film improvement for standard vacuum molding; and the third, Ghosh, testing of textiles and membranes. None is concerned with the problems confronted and solved by the present inventors, formation of wide paint film products that can be wider than the starting paint film sheet stock. So none of these references, Ghosh included, can be applied under the meaning of Sec. 103(a). See, Oetiker, 977 F.2d at 1447, 24 USPQ2d at 1445.

The Examiners' mention of "stretching" in Paper No. 040705, as if it were a valid technical field for the ordinary artisan, is at best abstract and insufficient to provide the requisite evidential support or convincing line of reasoning to support the combination with Ghosh. If the pertinent field of endeavor were "stretching," then it would be possible to consider much if not nearly all mechanical arts as relevant. This clearly is not the case. Compare, Arkie Lures, 43 USPQ2d at 1297; Clapp, 227 USPQ at 973. Furthermore, that a test fabric can be stretched to failure at 28% has nothing to do with drawing or stretching paint film sheet stock at least about 125% in manufacture. This would destroy the intent of Ghosh, but a reference cannot be destroyed to establish a case of obviousness. See, In re Gordon, 733 F.2d 900, 902, 221 USPQ 1125, 1127 (Fed. Cir. 1984).

Moreover, even for the sake of argument if these references could be properly combined, their combined teachings would not lead the ordinary artisan, who does not seek to innovate, to the present claimed invention. Note, Standard Oil, 774 F.2d at 455, 227 USPQ at 298. Rather, the teachings of the three references are so diverse that no direction whatsoever is given the pertinent ordinary artisan, not even general guidance. Even general guidance, however, is insufficient to establish a case of obviousness. See, In re Roemer, 258 F.3d 1303, 59 USPQ2d 1527, 1531 (Fed. Cir. 2001).

Again, Peterson does not show the process claimed in present (nor former) claim 10 as stated in Paper Nos. 110304 and 040705, and Paper Nos. 110304 and 040705 otherwise correctly admit this,

Smith et al., 10/743936

Am. Brief, p. 8

as referenced above. Claim 12 relates to paint film sheet stock.

Conclusion

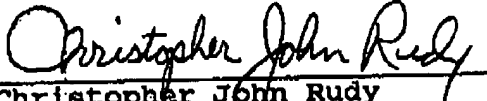
The reasoning of the Examiners is in serious error. Please, therefore, reverse the rejections of the Examiners, and allow this application.

Respectfully,

LESLIE E. SMITH ET AL.

Date: Nov. 15, 2005 A.D.

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Attd: Appendix (CLAIMS ON APPEAL)

Smith et al., 10/743936

Amd. Brief, Appendix p. A1

CLAIMS ON APPEAL

10. A method for forming wide paint film parts, which comprises:
providing apparatus for forming wide paint film parts, having a frame; and, attached to the frame, at least two paint film stock grasping members, which generally oppose one another, which can grasp deformable paint film stock, at least one of which can be moved apart from the other while the stock is grasped;
providing deformable paint film stock, which is:
in a form of a discrete, substantially planar sheet,
made of a laminate material including a deformable base having a paint film laminated thereon that provides a painted surface finish, and
able to be itself formed into a part through vacuum or pressure molding;
grasping the stock sheet on generally opposing sides by at least two paint film stock grasping members; and
moving, while the stock is so grasped, the at least one of the at least two paint film stock grasping members apart from the other so as to draw or stretch the stock between the at least two paint film stock grasping members in the plane of the sheet so as to form a planarly drawn or stretched planar laminate paint film sheet that retains a painted surface finish.
11. The method of claim 10, wherein heat is applied to the stock sheet to facilitate stretching.
12. The method of claim 10, wherein the stock sheet is stretched to at least about 125% of at least one of its original dimensions it had before stretching.
20. The method of claim 10, wherein the deformable base of the stock sheet is a thermoformable material.
21. The method of claim 20, wherein the stock sheet is loaded in the apparatus, and the stock sheet is grasped by the paint film stock grasping members through jaws associated with said members; then the stock sheet in the loaded apparatus is softened by heating; and then the stock sheet is drawn or stretched.
22. The method of claim 21, wherein the softened stock sheet is drawn or stretched along at least two non-parallel axes in the plane.
23. The method of claim 22, wherein the stock sheet is substantially rectangular or square.
24. The method of claim 23, wherein two of the at least two non-parallel axes are substantially orthogonal to one another.

Smith et al., 10/743936

Amd. Brief, Appendix p. A2

25. The method of claim 24, wherein the stock sheet and apparatus loaded with it is moved into an oven for heating, and then is drawn or stretched.

26. The method of claim 10, wherein the drawn or stretched planar laminate paint film sheet is further subject to vacuum or pressure molding to form a three dimensional wide paint film stock part.

27. The method of claim 26, wherein the drawn or stretched planar laminate paint film sheet is substantially cooled before it is further subject to the molding.

28. The method of claim 26, wherein a mold is moved into position with respect to the drawn or stretched planar laminate paint film sheet to subject it to the molding, without substantial cooling of the drawn or stretched planar laminate paint film sheet.

29. The method of claim 22, wherein the drawn or stretched planar laminate paint film sheet is further subject to vacuum or pressure molding to form a three dimensional wide paint film stock part.

30. The method of claim 29, wherein the drawn or stretched planar laminate paint film sheet is substantially cooled before it is further subject to the molding.

31. The method of claim 29, wherein a mold is moved into position with respect to the drawn or stretched planar laminate paint film sheet to subject it to the molding, without substantial cooling of the drawn or stretched planar laminate paint film sheet.